



Saskatchewan
Agriculture
and Food

FARM FACTS

Marketing Hay

Successful Hay Marketing

Saskatchewan has a large area of tame forages covering approximately 6.5 million acres. Three and a half million of those acres are harvested for hay. Much of the hay is used onfarm to feed beef and dairy cattle, horses and specialized livestock. Some of this hay production is sold off-farm to cow-calf producers, backgrounders, feedlots and forage processing plants.

Hay acres continue to expand in Saskatchewan, and selling hay off-farm is becoming more common. With an increasing number of hay sellers in the province, producers must develop markets in Saskatchewan and further afield, as well as marketing skills to allow them to capture and keep market opportunities.

Hay is a relatively bulky, low value commodity. Maximum value must be obtained from the hay to offset the high cost of moving the product to the end user. Maximum value is obtained by producing as high a quality product as economically possible, and obtaining the maximum possible price for the product.

The hay market is variable, with end use and associated quality requirements being the main defining elements of each market. Markets can be either domestic or overseas. Most overseas markets for long hay are accessed through cooperation with a processing or marketing company.

In order to successfully market and maximize profits when selling hay, a number of critical success factors must be addressed. These factors include *transportation, quality, customer needs and markets.*



Large square bales are efficient to transport, and are becoming more common in Saskatchewan.

Transportation

The single most important factor when considering a market for hay will be the cost of transportation. As hay is a bulky, low value product, transportation costs can rapidly consume any profit in a sale. Hay packaging is an important way to reduce trucking costs. Hay can be packaged as soft or hard-core round bales, or small, medium and large square bales.

Each type of hay packaging has advantages and disadvantages. Soft core bales can be safely baled at relatively high moisture contents, but have less structural density and generally lower weight than hard-core round bales. Small square bales are labour intensive, and vary in density. Medium and large square bales have the greatest density of all bale types, stack and ship easily. The availability of large square balers is limited in some areas, and moisture content of hay must be low to avoid spoilage.

The cost of transporting hay is a major consideration when selling into any market. Hay buyers usually price hay by determining the local price for hay of the desired quality,



Trucking costs are a major factor when marketing hay.

and then deducting the freight from the seller's shipping point. As the market for the hay becomes more distant, the cost of freight to the hay seller becomes greater, reducing the profitability of shipping to distant markets.

Trucking rates will reflect current fuel prices, so be sure to check with trucking firms to obtain up-to-date hauling charges.

Transportation of hay requires knowledge of trucking rules and regulations, not only at the point of loading, but also in the various jurisdictions that the hay will be passing through on the way to its destination. Knowledge of maximum lengths, widths and weights, permits and phytosanitary requirements are needed.

When shipping to markets out of Saskatchewan, it is necessary to know trucking regulations, such as weight restrictions and maximum widths, differ among different states and provinces. To avoid problems, be sure to be aware of these restrictions when planning loads.

Information on trucking requirements for North American jurisdictions can be obtained from the Rand McNally Motor Carrier's Road Atlas. Additional information on trucking can be obtained at:

The Canadian Trucking Alliance
130 Slater Street, Suite 1025
Ottawa, Ontario K1P 6E2
613-236-9426

U. S. Dept. of Transportation
Federal Highway Administration
www.fhwa.dot.gov

Quality Requirements

Every market has different quality requirements and methods of determining quality. The measurement of hay quality is an evolving science, with a number of methods of being developed by scientists for measuring and comparing various quality parameters that are important to the end user of the feed.

Traditionally, quality measurements have been based on chemical analysis of hay. Some effort needs to be spent to become familiar with important quality parameters for the target market. Determine from the buyer what documentation is required to confirm the quality of the hay being purchased, and where a lab analysis needs to be completed.

Some of the quality measurements used by the hay industry to communicate hay quality are:

- **Protein Content** – or crude protein, is measured by determining the proportion of nitrogen in the sample and multiplying by 6.25. This measurement does not indicate anything about the quality of protein, just how much is present. Protein percentage is a standard quality parameter in the hay industry.
- **Relative Feed Value (RFV)** – RFV uses a single number to describe the quality of alfalfa hay. Relative Feed Value considers protein content and fibre value. RFV can only be used to describe alfalfa.
- **Fibre Content** – Fibre content is usually measured by determining Neutral Detergent Fibre (NDF) and Acid Detergent Fibre (ADF). These measurements measure the amount of fibre in the feed; low numeric values of NDF and ADF are desirable, as this results in increased feed intake.

Other quality parameters important in some hay markets include:

- texture ("hardness" of the hay)
- stage of maturity at harvest
- leaf attachment
- free of mold and dust
- colour
- weed-free

Hay Sampling Tips

- sampling is best accomplished with a probe available at Saskatchewan Agriculture and Food Rural Service Centres
- probe 15-20 bales to obtain a representative sample of hay quality
- if a probe is not available, take numerous samples throughout the stack and subsample for a total volume of two litres

Customer Needs

Know what the buyer wants. Quality, hay type, packaging, payment options, transportation costs and delivery requirements are all aspects of a sale that need to be communicated from the buyer to the seller. Offering what the customer needs makes the decision to buy your product simple.

Hay Markets

Rarely does an entire hay crop come off as top-quality feed. Develop markets to sell lower quality feed in order to maximize profits on the entire hay crop. Hay markets can be grouped into several broad categories, which include:

Beef Market

The beef hay market is the dominant hay market in Saskatchewan, with 2.8 million beef cattle in Saskatchewan. This market is a low quality, price-sensitive market. There are considerable differences in feed quality requirements within this market, varying from low-quality hay as a fibre source to relatively high-quality hay to feed replacement heifers and cows late in pregnancy. With low prices paid for this class of hay, the ability to truck to distant customers is limited, unless drought has pushed the value of this type of hay significantly higher than its long-term value of approximately \$60/ton.

Dairy Market

The dairy industry predominantly requires alfalfa hay. Although the market in Saskatchewan for this type of hay is relatively small, due to the modest size of the dairy industry, it is a high-value market. Because of the relatively high value of dairy-quality alfalfa, in some situations, accessing distant markets, such as Wisconsin and other U.S. Lake states can be economical. These markets require a Relative Feed Value of 150 or greater, with protein contents of 22 to 30 per cent. Many dairies have been increasing the use of silage in their feeding programs, reducing the demand for hay in their operations. The dairy industry prefers small, medium or large square bales, depending on the feeding system and equipment available.

Horse Market

The horse market is a diverse market that can include a wide variety of end users. This market includes hobby horse owners, horse breeders, racing facilities, and pregnant mare urine (PMU) farms. On a continental basis the major segment of the industry are horse breeding farms and racing circuits.

The market for horse hay is traditional and varies somewhat from buyer to buyer, but quality requirements for this market generally is as follows: good green colour, free of dust, spores and mould, and protein between 12 to 18 per cent. Although these requirements are relatively consistent across this market, additional hay characteristics such as stem coarseness, presence of fescues and protein levels vary from customer to customer. Timothy hay is preferred in many markets. The horse industry requires small square bales. Horse hay buyers can be considered the most discriminating of hay buyers, and usually will pay top dollar, and travel significant distances to obtain the quality of hay that they desire.

Processed Forage Market

Traditionally Saskatchewan's processed forage market has been dominated by alfalfa production for the dehydrated pellet, suncure pellet, and suncure cube market. Dehydrated alfalfa is made from chopped alfalfa hauled directly from the field. Producers contract acreage to a processor, and, due to the specialized equipment required, the processor harvests and removes the crop. Processors use baled alfalfa for the production of suncure pellets and cubes. Hay is in round bales and often is obtained on excess dehy contract acres or is purchased on the spot market. Processors sometime advertise in the farm press to obtain suitable hay. Quality requirements for suncure alfalfa products include fine stems, green colour, and medium-to-high protein levels (16 per cent plus). In recent years, double compressed hay production for sale into Pacific Rim markets has increased in western Canada. The most desirable crop for this market is timothy. Timothy production in Saskatchewan is mainly centred in the eastern part of the province and on irrigation, where ample water makes production feasible.

Export Markets

Major export markets for long hay in North America exist in the lower mainland of British Columbia, the Great Lake States, Corn Belt, and the Southern Plains of the United States. The main barriers into these markets are transportation costs and providing the high quality product that these markets demand. Hay markets can develop in various areas, particularly during droughts. Increased prices during droughts may allow hay sellers to access markets profitably that are otherwise not economically feasible during times of average hay prices.

Market Information and Market Research

Hay is not traded on an orderly market system, as listed on commodity exchanges. This makes obtaining hay price information considerably more of a challenge than for other agricultural commodities such as grain crops, cattle and hogs. Consequently, the hay buyer, seller or broker must take a more active role in determining price trends in the marketplace.

Saskatchewan Hay Production and Value (1984-2000)

Year	Acreage (lbs/ac)	Yield (tonnes)	Production (\$/tonne)	Farm Price (\$)
1984-85	1,800,000	2549	2,087,000	78.00
1985-86	1,800,000	2659	2,177,000	81.00
1986-87	1,860,000	3326	2,812,300	67.00
1987-88	2,000,000	2794	2,540,000	68.00
1988-89	2,050,000	1890	1,723,700	81.00
1989-90	2,150,000	2598	2,540,100	67.00
1990-91	2,250,000	2794	2,857,600	63.00
1991-92	2,336,500	3502	3,719,500	48.00
1992-93	2,800,000	2358	3,002,800	52.00
1993-94	2,800,000	1995	2,540,100	65.00
1994-95	3,250,000	2886	4,263,800	56.00
1995-96	2,950,000	1623	2,177,200	63.00
1996-97	2,786,000	2961	3,750,000	90.00
1997-98	2,800,000	1282	1,632,400	91.00
1998-99	2,815,000	2197	2,812,300	86.00
1999-2000	3,160,000	2873	4,127,700	-
average	2,475,469	2545	2,797,700	66.00

Price discovery for hay is accomplished by surveying market conditions locally, regionally and distantly.

Local market information can be obtained by sales information from neighbors, local hay auction results, purchases by local livestock sales facilities and feedlots, and asking prices for hay advertised for sale in the local press. Marketing low-quality hay locally often makes sense, as excessive freight costs rapidly consume the narrow profit margins on such feed.

Regional price information can be obtained by checking "hay wanted/for sale" in farm newspapers, checking buying prices at area forage processing plants purchasing dry hay, hay auction results, and Saskatchewan Agriculture and Food's Forage and Feed Listing Service (1-800-667-7564, www.agr.gov.sk.ca/feedforage).

The Internet is a very useful tool in obtaining hay price trends on a *national and international* scale. A search under "forages" will identify a number of websites directed to buying, selling and reporting on crop conditions and hay prices.

Hay Brokers

Many producers choose to market their hay to a broker rather than the end user. Brokers can be an attractive option for some producers because:

- many producers lack the time and/or skills necessary to direct sell their hay;
- brokers often pay the transportation costs; and
- brokers will work with suppliers on a long term basis if quality can be assured.

Hay producers who use the services of brokers must realize that brokers are not in the business of promoting individual hay producers. Many of the buyers (farms, ranches, etc.) are unaware of the origin of the hay that they are buying.

Brokers demand the following from their suppliers:

- loyalty (single source to that broker only);
- quality product (as defined by the broker);
- good price (dependant on the year and availability);
- appropriate packaging; and
- consistency of supply.

Since the broker is dealing with many different buyers, it is important to the hay producer to work with the broker to define the required hay quality.

Brokers maintain a network of suppliers that are trustworthy and deliver consistent quality product. Brokers are most likely to bring another supplier into their network through recommendation from one of their regular suppliers. Reputable brokers will pay hay suppliers promptly and regularly.

Permits

The Canadian Food Inspection Agency states that there are no regulations to inhibit the transfer of hay between Canada and the US.

According to US Customs, a custom's broker needs to make entry into the United States for the commercial shipper. A NAFTA Certificate is required to indicate that the hay is a duty-free product as well as a US Customs Invoice showing customer information. This service is provided by the customs broker for a fee of between \$20 and \$75 US. The fee charged is dependant on the volume of shipments per year. The more frequent the shipments, the lower the rate. Along with this fee is a US customs commercial fee of \$5 each time a commercial product crosses the border. A US customs bond is also required by the shipper to ensure unforeseen costs are covered. The cost of the bond is \$500 and is renewable annually.

Customs brokers located in Portland
Nelson & Co. 701-926-4444
Fowles & Co. 701-926-4141
Derinco & Co. 701-926-3000
Finn & Company 701-926-3001
Ernest & International Inc.
701-926-2600

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